Figure 1

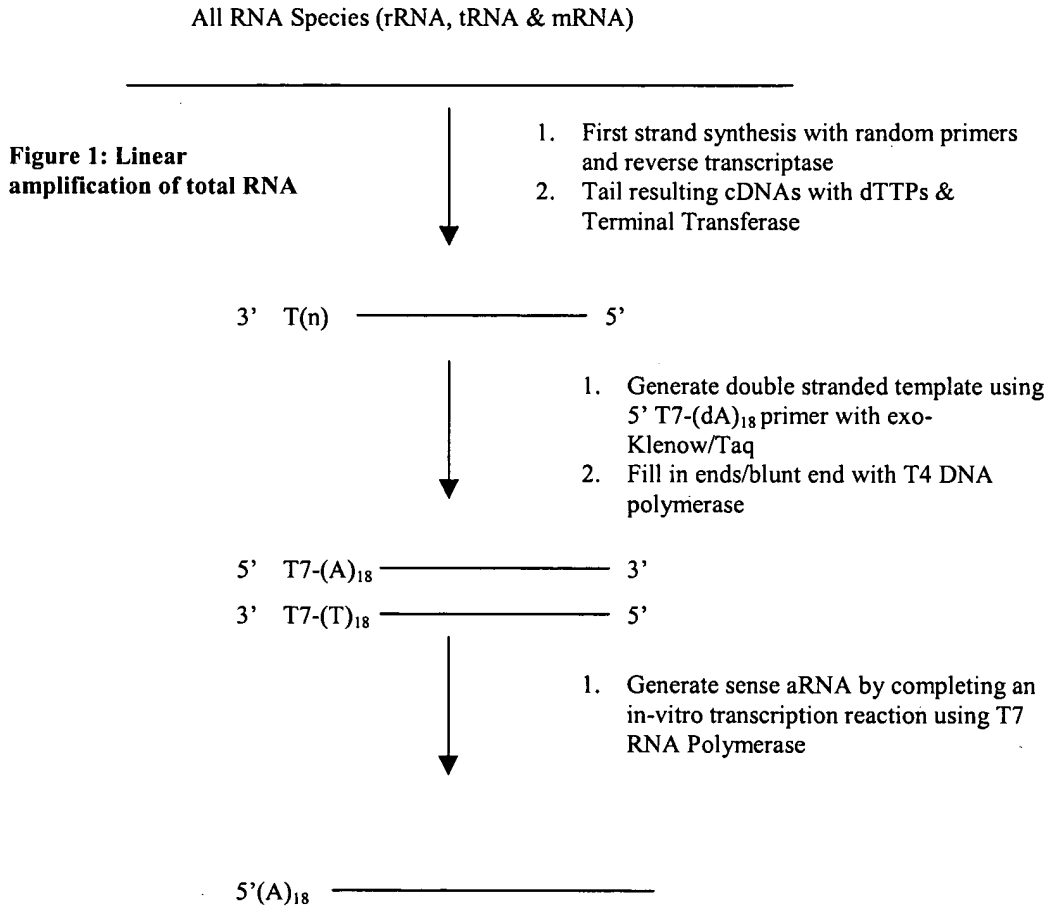

Figure 1: Linear amplification of total RNA

Figure 2

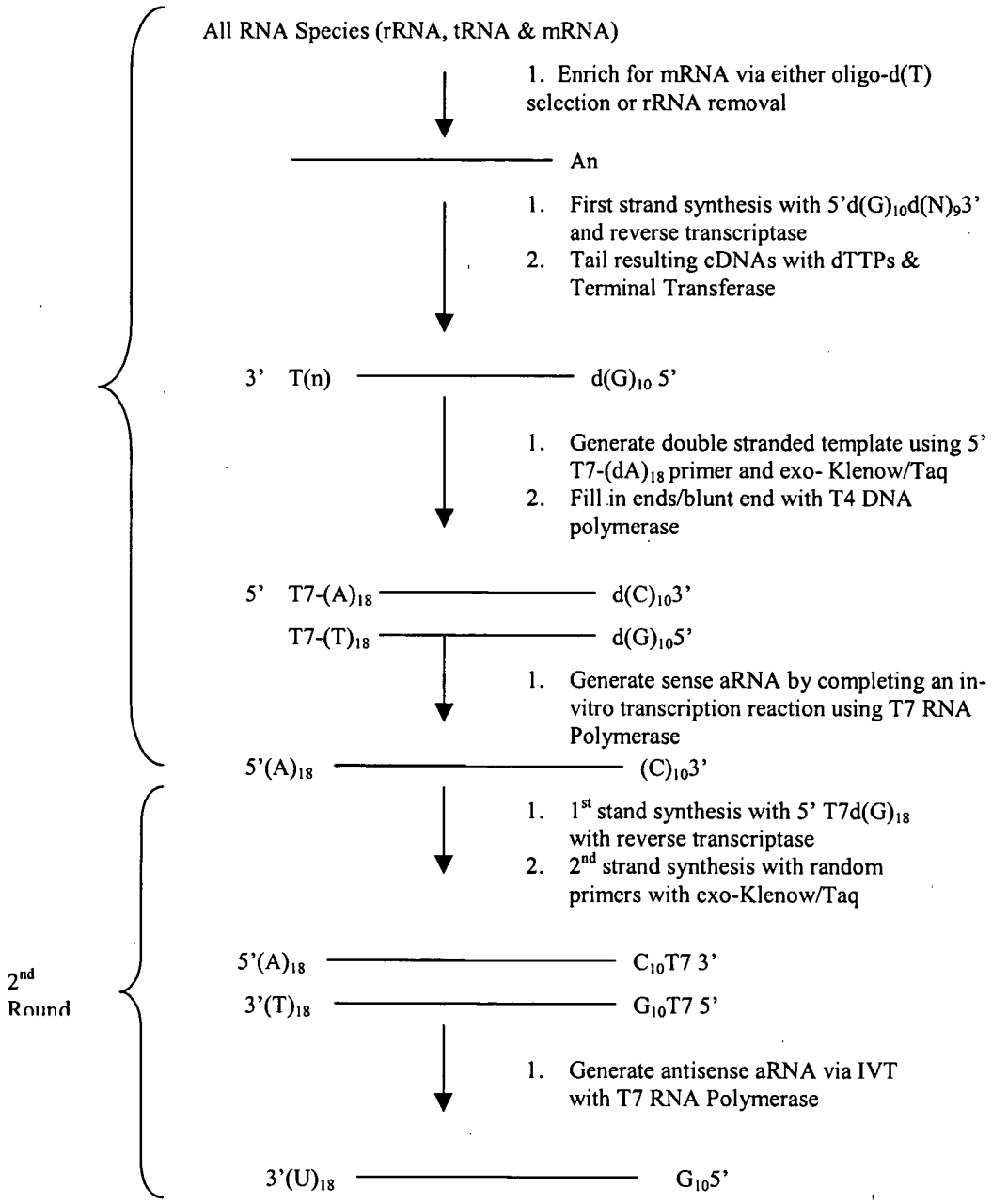
All RNA Species (rRNA, tRNA & mRNA)
1. Enrich for mRNA via either oligo-d(T) selection or rRNA removal
An
1. First strand synthesis with 5'd(G)10d(N)93' and reverse transcriptase
2. Tail resulting cDNAs with dTTPs & Terminal Transferase
3' T(n)
d(G)10 5'
1. Generate double stranded template using 5' T7-(dA)18 primer and exo- Klenow/Taq
2. Fill in ends/blunt end with T4 DNA polymerase
5' T7-(A)18
d(C)103'
T7-(T)18
d(G)105'
1. Generate sense aRNA by completing an in-vitro transcription reaction using T7 RNA Polymerase
5'(A)18
(C)103'
1. 1st stand synthesis with 5' T7d(G)18 with reverse transcriptase
2. 2nd strand synthesis with random primers with exo-Klenow/Taq
2nd Round
5'(A)18
C10T7 3'
3'(T)18
G10T7 5'
1. Generate antisense aRNA via IVT with T7 RNA Polymerase
3'(U)18
G105'

Figure 3

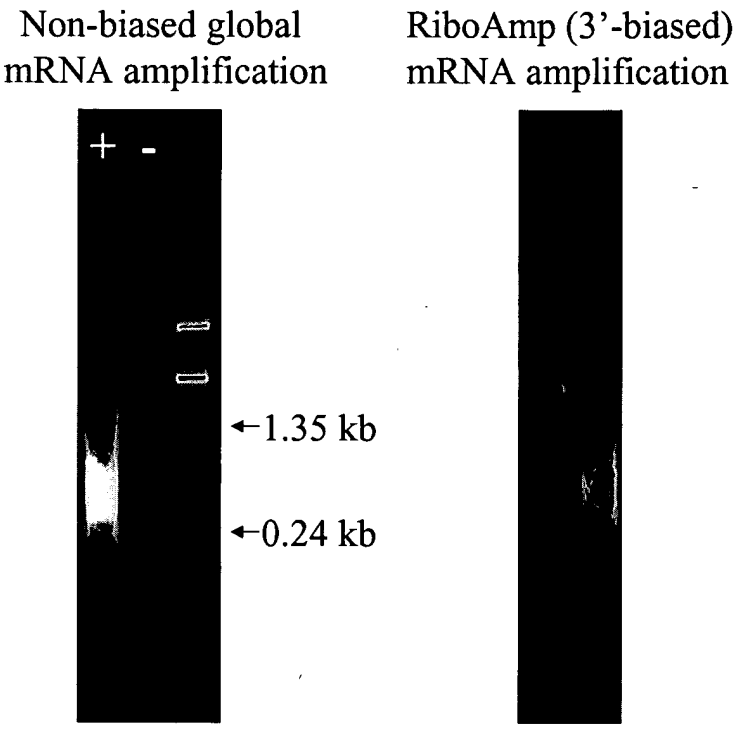

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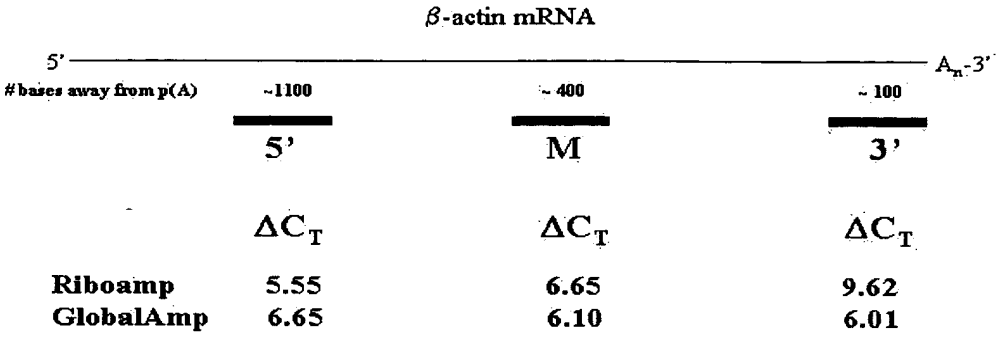
Figure 4

Global Amplification vs RiboAmp
ΔC_Ts unamplified vs amplified



	ΔC_T	ΔC_T	ΔC_T
Riboamp	**5.55**	**6.65**	**9.62**
GlobalAmp	**6.65**	**6.10**	**6.01**